AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0006	16-Nov-2001	W26GLG11705486	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
CONTRACTING OFFICE (CA/CW) US ARMY ENGR DIST NORFOLK ATTN: CENAO-CT 803 FRONT STREET NORFOLK VA 23510-1096	DACA65	**See Item 6**	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		9A. AMENDMENT OF SOLICITATION NO.
	X	DACA65-01-R-0022
	X	9B. DATED (SEE ITEM 11) 06-Aug-2001
		10A. MOD. OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [ ] is extended, [X] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

FYO2 DORMITORIES, LANGLEY AIR FORCE BASE, LANGLEY, VA

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED 16-Nov-2001

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

Technical Specifications and Drawings are amended as follows:

November 15, 2001

Langley Airforce Base FY-02 and FY-03 1+1 Dormitory

Amendment 4

Request For Proposal- Statement of Work

Statement of Work, Chapter 1, Paragraph 1-1.1- Replace the previous paragraph with the attached paragraph.

Statement of Work, Chapter 3, Paragraph 3-5 Replace the previous paragraph with the attached paragraph.

Statement of Work, Chapter 6, Paragraph 6.3.1 – **Revise** to read "Allowable Framing System: The primary support structure shall be a moment resisting frame system. Design shall be analyzed for progressive collapse prevention. For guidance see accompanying Department of Defense Interim Antiterrorism/Force Protection Construction Standards Progressive Collapse Design Guidance 4 April 2000. Column unbraced height shall be designed based on twice the story height. Column locations shall be coordinated with the architectural plans so that the columns are contained within the walls."

Drawings

C-1 UTILITY PLAN- **Move** the pump Station approximately 55 meters (180ft) North. **Add** 8 inch sprinkler system line. General Waterline changes. See attached drawing.

C-2 UTILITY PLAN- **Change** water line. See attached drawing.

A-1 OVERALL SITE- **Move** the pump Station approximately 55 meters (180ft) North. See attached drawing.

A-3 FLOOR PLANS- **Add** windows to the Second Floor Plan (Third Similar) Storage Room to match the elevations. (No drawings issued)

Change the window locations on each side of the partition between the Laundry and Mechanical Rooms to match the elevations (centered between exterior masonry pilasters). (no drawings issued).

A-4 ELEVATION- Pardon our poor spelling and **correct** the following words- Waterline, Water Table, Precast, and Medallion. (No drawings issued).

Sketches

RFP2.1, SKM-1, SKM-2-FIRE DAMPER- Add fire dampers to the exhaust duct risers for each bathroom stack, and change the walls around the exhaust duct riser to provide a two hour rated shaft. See attached sketches.

PROJECT SITE SIGN-Provide one sign as indicated in the sketch. See attached sketch.

Specifications

FY-01 1+1 Dormitory Specification Section 01700, As-Built Record Drawings and Shop Drawings, paragraph 1.3-**Add** the following information to the end of the paragraph:

"RECORD DRAWINGS/DATA

1. GIS Data: The contractor shall use conventional surveying and other methods, such as a total station or Global Positioning Systems (GPS) for collection of as-built information at an accuracy level in accordance with "Geospatial Positioning Accuracy Standards, Part 3:

National Standard for Spatial Data Accuracy," published by the Federal Geographic Data Committee (FGDC), dated July 1998. This document can be found at http://www.fgdc.gov/standards/status/sub1_3.html. All Survey data collected shall be provided to the Government in a digital format with an attached Survey Report identifying survey method, equipment list, calibration documentation, survey layout, description of control points, control diagrams, and field survey data. A Survey Control Database (consisting of a survey marker database and a survey traverse database) will be produced for all survey control points established under this contract, and delivered in a **.dbf** or **ASCII comma-delimited** format. If GPS is used, the contractor shall use survey grade GPS, at an accuracy level of +/- 2cm., when appropriate, to collect data to be overlaid onto the installation's orthophotograph and/or base map.

2. All locational feature data (points, lines, polygons) collected shall be delivered in Arc/Info format along with the original source files. The Geospatial files shall have an external spatial reference file (**.prj**) attached specifying the parameters of the coordinate system used (as provided by the government). All topologically correct geospatial data shall overlay on the installations latest orthorectified imagery provided by the government. All accuracy errors shall be reported to the contract project manager.

3. Feature Attributes: The contractor shall identify the classification, type, size, location, ID number, and any other necessary attributes (specified by the Government) for all surveyed, mapped, designed, or proposed features. All symbol libraries, font libraries, text sizes, text formats, and text placements should be prepared in accordance with the SDS where practical. The contractor shall not develop new libraries without prior written approval from the Government.

4. All graphic and non-graphic data will be collected in the format defined by the *CADD/GIS Technology Center's Spatial Data Standards (SDS) release 2.0* (or the most current version available), except where modified by the Government. This document can be found at http://tsc.wes.army.mil/products/tssds-tsfms/tssds/projects/sds/.

5. The contractor shall provide metadata files for all locational data produced under this contract. The metadata file shall conform to the Federal Geographic Data Committee's "Content Standard for Digital Geospatial Metadata, Version 2.0" (or latest version) found at http://www.fgdc.gov/metadata/contstan.html. The output from metadata generator software shall be the standard format for all metadata files created under this contract. In addition, the metadata data shall be provided in **ASCII text** format. The digital metadata files shall be provided to the Government along with each product deliverable, unless otherwise approved in writing by the Government.

6. The Government will provide the contractor with data and information concerning all necessary and pertinent functions and principal features of the identified project. These items will include:

- The installation's latest georeferenced digital planimetric data and/or base map in ESRI Arc/Info format, or best format available, with associated data files.
- The installation's latest orthorectified imagery and specified geospatial parameters (coordinate system, datum, projection, distance units).
- Any pertinent and necessary prototype or seed files.
- A copy of CADD/GIS Technology Center's Spatial Data Standards (SDS) release 1.95 (or latest version) on CD-ROM.

- A copy of "Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy," published by the Federal Geographic Data Committee (FGDC) in Adobe Acrobat Reader (.pdf) format.
- Frequency settings for the Real-Time Kinematic (RTK) GPS Base Station and the preferred GPS receiver specifications.
- Any other data or schematics deemed necessary for project completion, pending approval from the Government.

7. At the time of beneficial occupancy, the CONTRACTOR shall submit as-built data to the CONTRACTING OFFICER, or his/her designated representative incorporating the aforementioned information into the project drawings. The CONTRACTOR shall also ensure a copy of all as-built data is delivered to the Base GeoBase office. The as-built deliverable (plans, shop drawings, surveys, studies, imagery, designs, manuals, spare parts lists, etc.) shall be in a ***digital*** (electronic information) ***format*** and shall be delivered on standard compact disks (minimum 650 megabytes) in a format that is directly compatible with the CADD/GIS Technology Center's Spatial Data Standards version 2.0 (or latest version available). No "red-line" or marked-up drawings will be accepted."

End

Replace the previous Statement of Work, Chapter 1, Paragraph 1-1.1 with the following-

CHAPTER 1

DESIGN OBJECTIVES

1-1.1 **SCOPE OF WORK.** Design and construction shall comply with the specifications and requirements contained in this Request for Proposals (RFP). The design and technical criteria contained and cited in this RFP establish minimum standards for design and construction quality. The objective of this solicitation is to obtain a campus complex of buildings complete and adequate for assignment as Air Force Dormitories. This contract shall consist of the design and construction of dormitories, including common support spaces, for 96 persons (with an optional facility for an additional 96 persons), site work, and associated facilities on Government-owned land at Langley Air Force Base, Virginia.

Record documents for the FY-01 1+1 Dormitory is included in this RFP. These documents shall be the standard for developing the design of the FY-02 and FY-03 1+1 Dormitory. The requirements of the FY-01 1+1 Dormitory specifications apply to this project also. Sleeping modules, finishes, equipment, architecture, and engineering shall match except as modified by other portions of this RFP. Concept drawings for the FY-02 and FY-03 1+1 Dormitory buildings are included in this RFP and shall be used to determine the shape and location of the new facility. Civil and electrical drawings and geo-technical reports include information on existing conditions that must be considered by the Contractor in designing the new facilities. The Sewer Pump Station shall be designed and built under this contract as identified by the FY-02 and FY-03 1+1 Dormitory Documents and based on the pump station working drawings. See FY-02 and FY-03 1+1 Dormitory Documents for revised location of the pump station. The Langley Air Force Base Dormitory Campus Development Plan is included showing information on future projects and shall be considered in developing the current project. The adjacent parking lots, pavement, curb and gutter will be built under separate contract. Any damage caused to existing facilities while performing this work must be corrected by the Contractor. Coordination with ongoing projects in the vicinity is required. Site access coordination with the current construction of the FY-00 and Fy-01 Dormitory shall be required for the first 6 months of this contract while that project is being finished.

Replace the previous Statement of Work, Chapter 3, Paragraph 3-5 with the following-

CHAPTER 3

SITE PLANNING AND DESIGN

3-5 **SITE PLAN.** Site plan for the RFP submittal has been developed from existing record drawings, Installation Master Plan documents, other on-file surveys and information regarding to Langley Air Force Base. The successful offeror shall supplement the developed site schematics with additional topographic surveys as necessary, which will accurately locate existing utility infrastructure and other site

features and will depict the proposed new features (building, utilities, grading, drainage, equipment, etc.)The Langley AFB vertical and horizontal survey datum shall be NAVD 88. FY-01, FY-02 and FY-03 1+1 Dormitory documents issued in this RFP use the NASA User datum. Upon award to the successful contractor a revised survey for the construction area will be provided by the Government showing the NAVD 88 Survey datum. This drawing shall be used by the contractor for completing the design.

End

DEPARTMENT OF DEFENSE
INTERIM ANTITERRORISM/FORCE PROTECTION
CONSTRUCTION STANDARDS

PROGRESSIVE COLLAPSE DESIGN GUIDANCE

4 April, 2000

The following provides guidance for designers to use in implementing the progressive collapse requirements in the DoD Interim Antiterrorism/Force Protection Construction Standards. This guidance may be used until more formal guidance is established in the DoD Security Engineering Manual.

A progressive collapse is a chain reaction of failures following damage to a relatively small portion of a structure. The damage resulting from progressive collapse is out of proportion to the damage that initiated the collapse. Consequences of progressive collapse are unnecessary loss of life and trapping survivors in the collapsed structure. Soon to be published errata to the 16 December 1999 Department of Defense Interim Antiterrorism/Force Protection Construction Standard states the following. "For all inhabited structures of three stories or more, design to sustain local damage with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage. This shall be achieved through an arrangement of the structural elements that provides stability to the entire structural system by transferring loads from any locally damaged region to adjacent regions capable of resisting those loads without collapse. This shall be accomplished by providing sufficient continuity, redundancy, or energy dissipating capacity (ductility) or a combination thereof, in the members of the structure. That analysis will include removal of one primary vertical or one primary lateral load-carrying element without progressive collapse. For further guidance, refer to American Society of Civil Engineers Standard 7-98, Minimum Design Loads for Buildings and Other Structures."

The sequences of events that occur during a potential progressive collapse event are diagrammed in Figure 1. However, there are two different approaches that can be used to obtain resistance to progressive collapse. These approaches are referred to as direct and indirect design and are defined as follows:

Direct design is the explicit consideration of resistance to progressive collapse during the design process through either the alternate path method or the specific local resistance method. The alternate path method allows local failure to occur but seeks to provide alternate load paths so that the damage is absorbed and major collapse is averted. The specific local resistance method seeks to provide sufficient strength to resist failure by defining a load for which the structure must be designed.

Indirect design is the implicit consideration of resistance to progressive collapse during the design process through the provision of minimum levels of strength, continuity, and ductility.

The guidance presented in this document adopts the alternate path method. The other methods may be included in the DoD Security Engineering Manual as is appropriate. The primary objective in a progressive collapse analysis is to check the structure for alternative load paths after some elements are potentially lost through some abnormal loading such as an explosive event. These alternative load paths will need to provide sufficient damage tolerance to minimize the loss of life that might otherwise occur and will allow the safe egress of occupants from the damaged structure.

ALTERNATE LOAD PATH ANALYSIS PROCEDURE

Perform a two- or three-dimensional static analysis of the structure to evaluate the effects of the removal of either one primary vertical or one primary lateral load-carrying element. This should be done for several locations throughout the structure. This analysis must be performed in addition to any other load analyses. For inhabited structures where the threat/risk analysis indicates that there is no threat to the facility the DoD minimum standards apply and removal of the primary load carrying elements shall be limited to external building perimeter members as described below. Where the threat/risk analysis indicates only an external explosive threat, the collapse analysis will also be limited to external building perimeter members. Where the threat/risk analysis indicates that there is an internal explosive threat, a progressive collapse analysis shall be performed that includes the removal of primary external and internal load-carrying elements. Dead and live loads associated with the removed elements shall be distributed to adjacent members or to the floor in the story below the removed elements. To begin the progressive collapse analysis, the following structural elements shall be removed:

Moment resisting frame systems. Remove only one column or one beam at any level within the structure for each analysis. Any in-fill walls that provide lateral support to the column or beam on either side of a removed column or above a removed beam shall also be removed. If a structural slab system is used (instead of beams), remove one full bay of the slab. In this case, a bay is defined as the area bounded by four columns.

Loadbearing/shear wall systems. Remove a width of wall equal to two times the wall height but no less than the distance between expansion or control joints. At corners, with loadbearing or shear walls in two directions, remove a width of wall equal to the wall height in each direction but no less than the distance between expansion or control joints. Wall height is defined as the vertical distance between horizontal supporting elements. The width of wall to be removed may be reduced to actual distance between vertical intersecting elements that are loadbearing and are structurally connected to the wall being removed. If a structural slab system is used (instead of beams), remove an area of slab equal in width to the wall removed and in length back to the first interior loadbearing element.

Braced frame system. Initiate analysis by the removal of only one column, or one beam for each analysis as described for the moment resisting frame systems. Provide redundant bracing along a column line such that the loss of a column or beam along with one bay of bracing will not result in the collapse of the remaining portions of the building. Bracing may consist of cross members, knee braces or "K" braces.

METHODS OF ANALYSIS

With the appropriate member removed from the structure, perform a two or three dimensional static linear elastic or non-linear structural analysis as indicated below.

For linear elastic methods, when the analysis indicates that the ultimate moment capacity of a member is exceeded, release the rotational degree of freedom for the member, insert a fixed resistant moment equal to the ultimate moment of the yielding member, and reanalyze the revised structure. If the shear capacity or response limits of a member are exceeded, the member is considered a failed member. A failed member must be removed from the model before proceeding with the remainder of the analysis. When a failed member is removed, any dead or live loads associated with the member must be accounted for by distribution to other members. This can be done by distributing the load to other members in the same story as the failed member or by adding the load of the failed member to the members in the story below the failed member. Perform this analysis in an iterative manner until the structure stabilizes. If progressive collapse occurs, revise the design and repeat the analysis procedure from the beginning.

For non-linear methods, only a single iteration of the analysis is required unless member shear capacity is exceeded or member response limits are exceeded. If member shear capacity is exceeded or response limits are exceeded, the member is no longer considered capable of carrying load and is considered a failed member. Failed members shall be removed from the model before the remainder of the analysis can be performed. When a failed member is removed, any dead or live loads associated with the member must be accounted for by distribution to other members. This can be done by distributing the load to other members in the same story as the failed member or by adding the load of the failed member to the members in the story below the failed member. If the analysis indicates that progressive collapse will occur, then revise the design as required, and repeat the analysis procedure from the beginning.

LIMITS OF DAMAGE

An acceptable level of damage resulting from the removal of the primary load carrying elements may extend into the story above and below the area where the member is being removed. For framed systems, the damage shall not extend to an area greater than one bay in any direction from a column. For other framed systems, damage shall not extend outside an area greater than 750 sq. ft (70 m^2) or 15 percent of the floor area.[1] If

[1] See reference Lyendecker and Ellingwood

the damage exceeds the allowable amount, revise the design and repeat the progressive collapse analysis procedure from the beginning.

LOADING

To avoid an overly conservative analysis, reduce the assumed loading on the structure to what is reasonably expected as indicated below. Note that the design live load is reduced to one-half of the total anticipated value.

$$P = D + 0.5*L + 0.2*W$$

where D = design dead load,
L = design live load, and
W = design lateral wind load.

MATERIAL AND MEMBER PROPERTIES

For concrete and steel, increase the strength of these materials to 10% above the specified design strength. This provides a realistic value of actual strengths in the materials. For masonry and wood, use the actual design strength without increase.

For all members in flexure, compression, torsion, and tension, use the nominal capacity, i.e., do not apply strength reduction (ϕ) factors. For all members in shear, evaluate by applying the appropriate strength reduction (ϕ) factors.

CONNECTIONS

To ensure that the structure performs as analyzed, all connections shall develop the capacity of the weaker member being connected unless analysis indicates that a reduced value may be used. In order to ensure ductility and reserve capacity in the connections, all seismic guidance located in TI 809-04 and TI 809-05 or guidance located within the DAHSCWE Manual on connection ductility shall be incorporated.

MEMBER RESPONSE LIMITS

Table 1 below provides the maximum allowable ductility and/or rotation limits for most structural members to limit the possibility of collapse. The values listed are for typical elements in conventional construction (i.e., construction that has not been hardened to resist to resist an abnormal load such as an explosive event).

Table 1. Structural Member Ductility and Rotation Limits

COMPONENT	DUCTILITY (μ)[1]	ROTATION (θ) [2]	Notes
Reinforced Concrete (R/C) Beam[3]		6-degrees	
R/C One-way Slabs w/o tension membrane[3]		6-degrees	
R/C One-way Slabs w/ tension membrane[3]		12-degrees	
R/C Two-way slabs w/o tension membrane[3]		6-degrees	
R/C Two-way Slabs w/ tension membrane[3]		12-degrees	
R/C Columns (tension controls)[3]		6-degrees	
R/C Columns (compression controls)	1		
R/C Frames		2-degrees	Max sidesway H/25
Prestressed Beams	2		
Steel Beams	20	12-degrees	
Metal Stud Walls	7		
Open Web Steel Joist (based on flexural tensile stress in bottom chord)	6		
Metal Deck	20	12-degrees	
Steel Columns (tension controls)	20	12-degrees	
Steel Columns (compression controls)	1		
Steel Frames		2-degrees	Max sidesway H/25
One-way Unreinforced Masonry (unarched)	1		
One-way Unreinforced Masonry (compression membrane)	1		
Two-way Unreinforced Masonry (compression membrane)	1		
One-way reinforced Masonry		2-degrees	
Two-way Reinforced Masonry		2-degrees	
Masonry Pilasters (tension controls)		2-degrees	
Masonry Pilasters (compression controls)	1		
Wood Stud Walls	2		
Wood Trusses or Joist	2		
Wood Beams	2		
Wood Exterior Columns (bending)	2		
Wood Interior Columns (buckling)	1		

Notes for Table 1.

1. Ductility is defined as the ratio of ultimate deflection to elastic deflection (Xu/Xe).

2. Rotation for members or frames can be determined using Figures 2 and 3 provided below.

3. Concrete having more than 2-degrees rotation must include shear stirrups per requirements of DAHSCWE Manual.

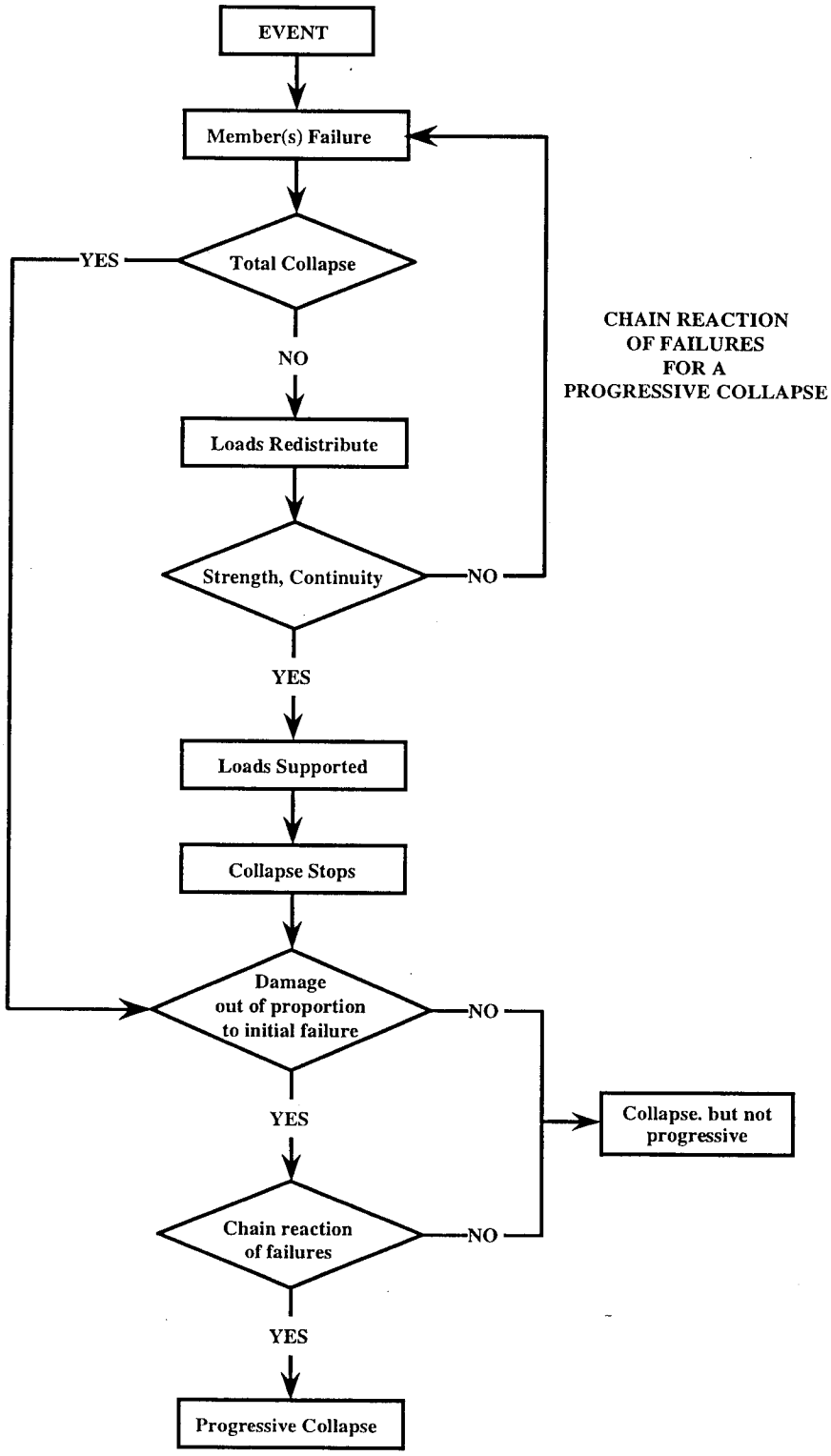


Figure 1. Progressive Collapse Flowchart

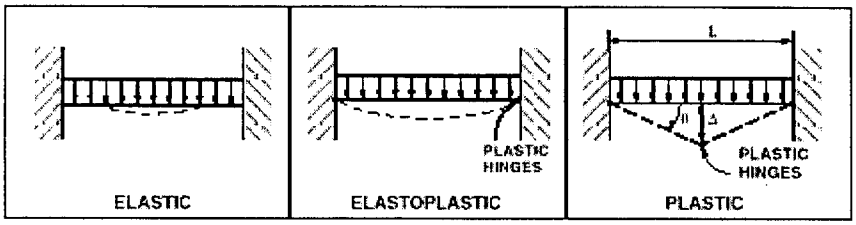


Figure 2. Measurement of θ After Formation of Plastic Hinges

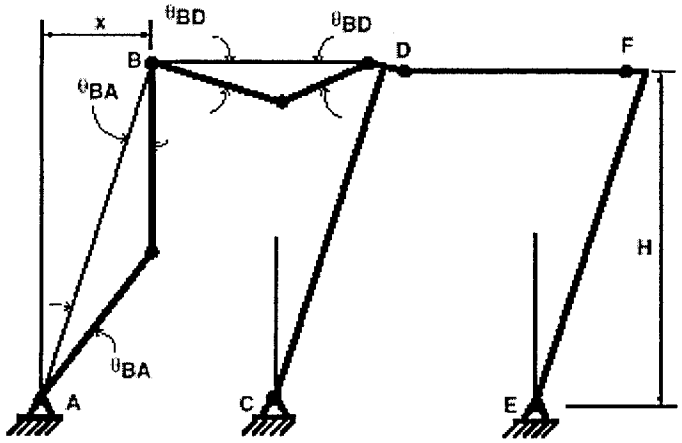


Figure 3. Sidesway and Member End Rotations (θ) for Frames

REFERENCES:

1. Conrath, Edward J., et al. *Structural Design for Physical Security, State of the Practice.* American Society of Civil Engineers, Reston, VA. 1999.

2. Ellingwood, Bruce and E.V. Leyendecker. "Approaches of Design Against Progressive Collapse." Journal *of the Structural Division*, Proceedings of the American Society of Civil Engineers, Vol. 104, No. ST3. March 1978.

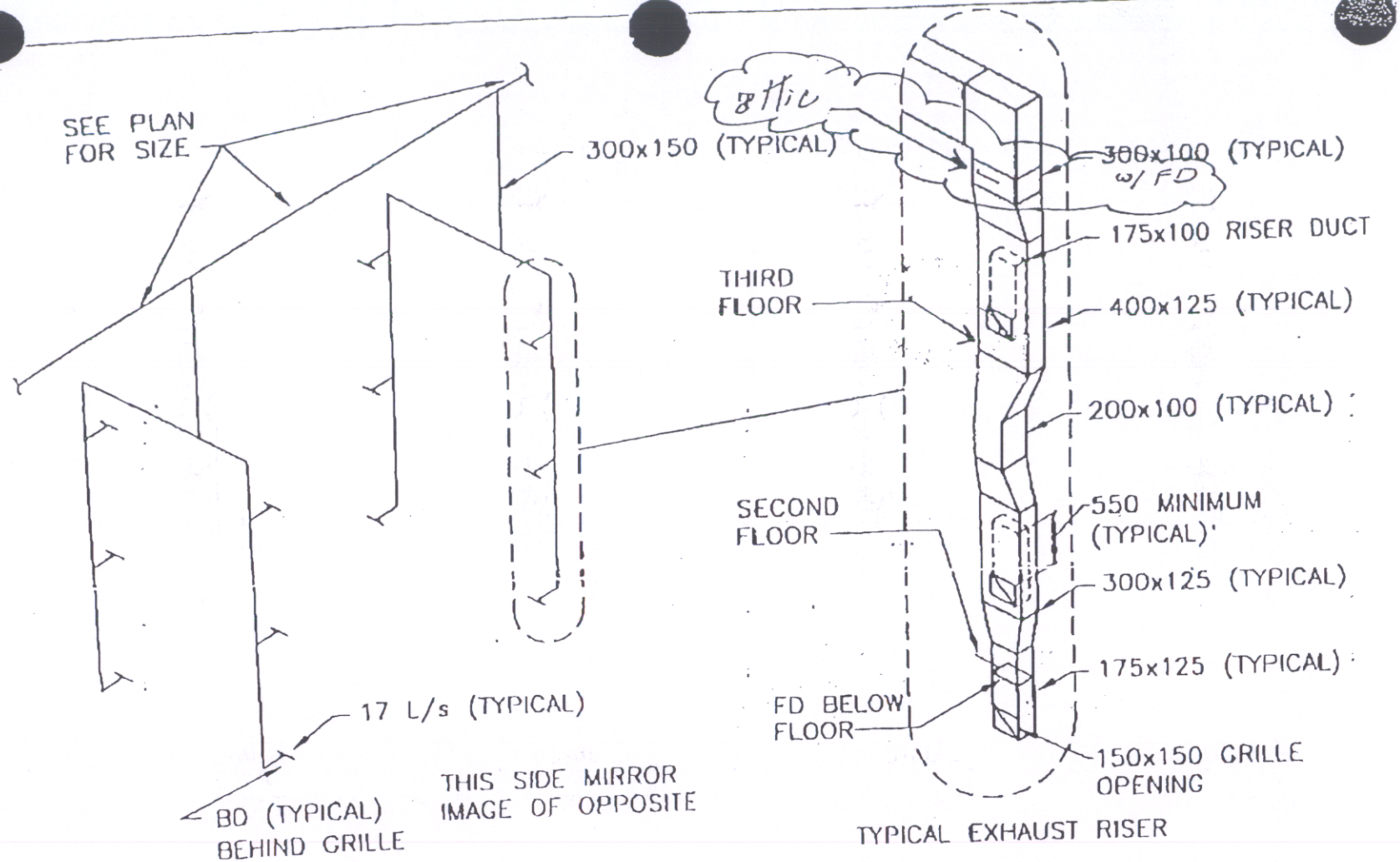
3. Hinmann, Eve E. and David J. Hammond. *Lessons From the Oklahoma City Bombing, Defensive Design Techniques.* American Society of Civil Engineers, New York. 1997.

4. Leyendecker, Edgar V. and Bruce R. Ellingwood. *Design Methods for Reducing the Risks of Progressive Collapse in Buildings.* National Bureau of Standards, Washington, DC, Apr 1977.

5. ASCE 7-98. *Minimum Design Loads for Buildings and Other Structures, 2000.*

6. Protective Design – Mandatory Center of Expertise Technical Report 92-2, *Facility And Component Explosive Damage Assessment Program (FACEDAP) – Theory Manual – Version 1.2,* SwRI Project No. 0605145-001, Modified May 1994.

7. Army TM5-855-1, Air Force AFPAM 32-1147 (I), Navy NAVFAC P-1080, and DSWA DAHSCWEMAN-97, *Design and Analysis of Hardened Structures to Conventional Weapons Effects* (August 1998).



TYPICAL MODULE TOILET EXHAUST RISER

NO SCALE

AGI Allsbrook Goodman, Inc. Consulting Engineers (757) 497-8090

DORMITORY
LANGLEY AIR FORCE BASE
HAMPTON, VIRGINIA

MODIFICATIONS TO TOILET EXHAUST RISER

SKM-1

NORFOLK DISTRICT CORPS OF ENGINEERS NORFOLK, VIRGINIA

MDSELEY HARRIS McCLINTOCK

JMG	JMG	12/6/01
JPW	AGI	NORFOLK

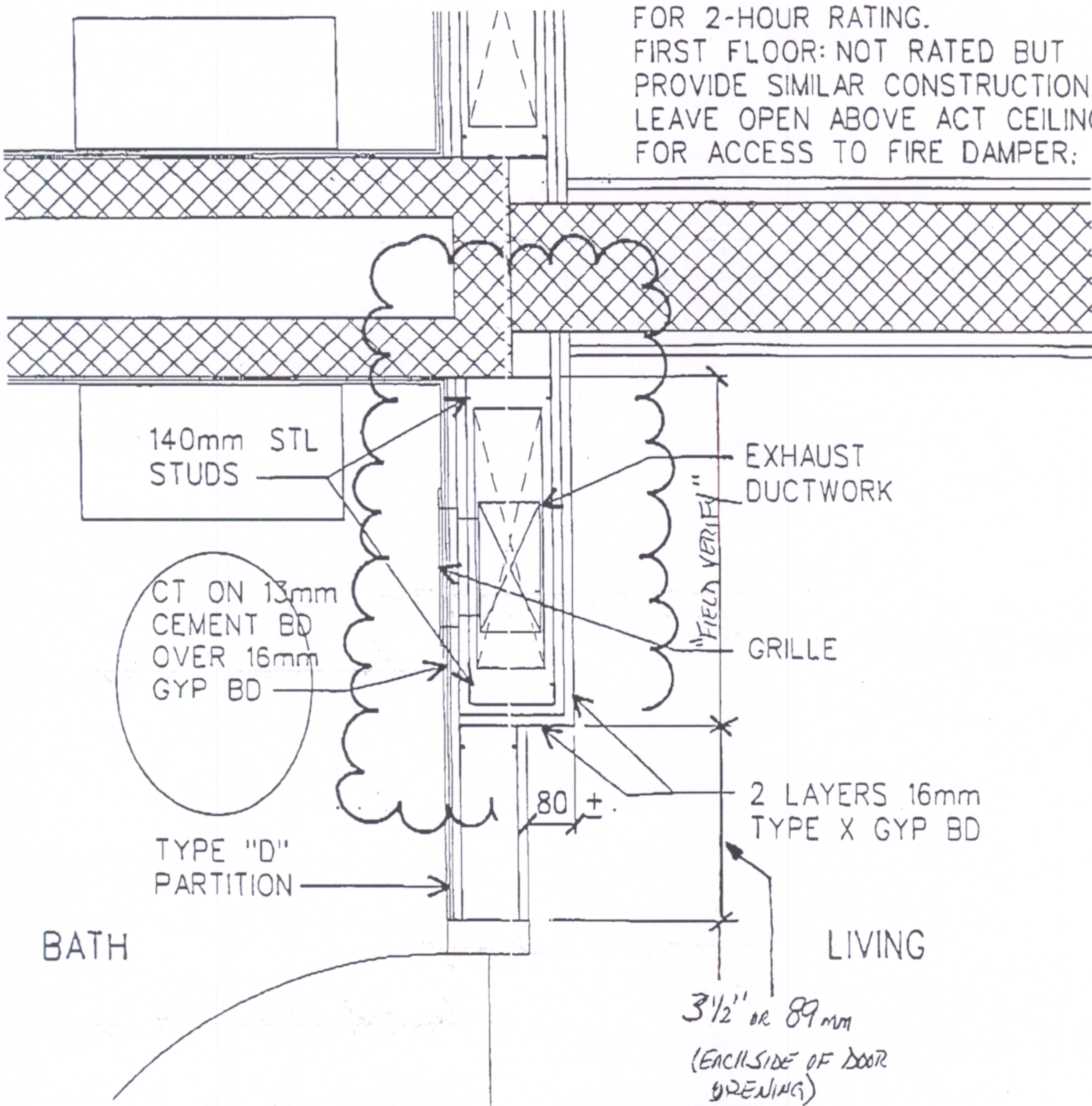
NUHJ-87-3007 | LF-434-1.

701-15-30

1 9/26/01 add FD, 3rd floor - attic

US Army Corps of Engineers Norfolk District

FABRICATE PARTITION AROUND EXHAUST DUCTWORK PER UL U425 FOR 2-HOUR RATING.
FIRST FLOOR: NOT RATED BUT PROVIDE SIMILAR CONSTRUCTION.
LEAVE OPEN ABOVE ACT CEILING FOR ACCESS TO FIRE DAMPER.



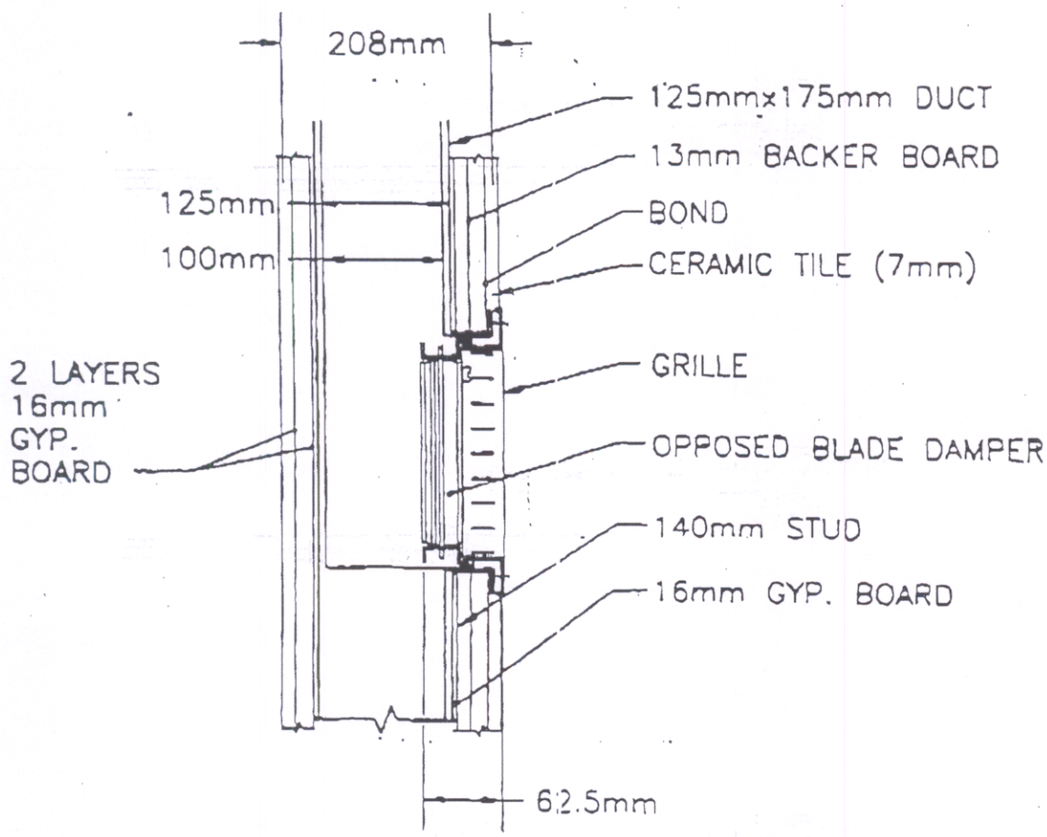
PLAN DETAIL - PARTITION

@ TYP. MODULE BATH 1:20

DRAWING TITLE:	PROJECT:
TOILET EXHAUST MODIFICATIONS	DORMITORY LANGLEY AIR FORCE BASE

MOSELEY HARRIS & McCLINTOCK
ARCHITECTURE ENGINEERING PLANNING INTERIOR DESIGN CONSTRUCTION SERVICES
780 LYNNHAVEN PARKWAY, SUITE 200 VIRGINIA BEACH, VA 23452 (757) 368-2800

DRAWN BY:	ATTACHMENT TO:	DWG. NO.:
TEP	RFP	RFP2.1
DATE: JUNE 6, 2001	COMMISSION NO.: 381980	



BATHROOM EXHAUST DETAIL

NOT TO SCALE

US Army Corps of Engineers Norfolk District

JMG | JMG | NONE | KUMU-87-3007 | LF-434-1 | 711-15-30

NORFOLK DISTRICT CORPS OF ENGINEERS NORFOLK, VIRGINIA

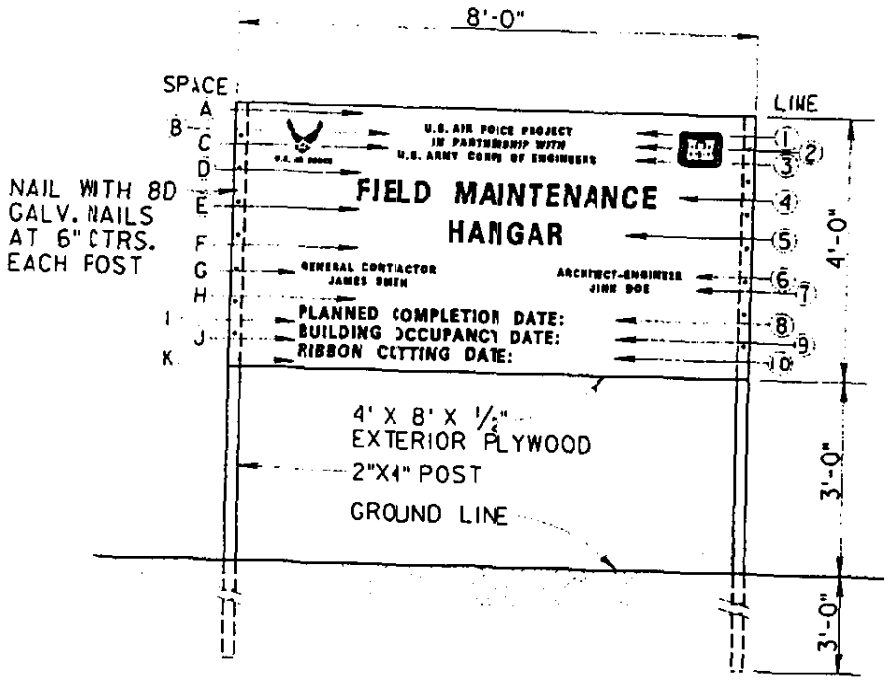
HOSELEY HUGHES & DECUNTOCK

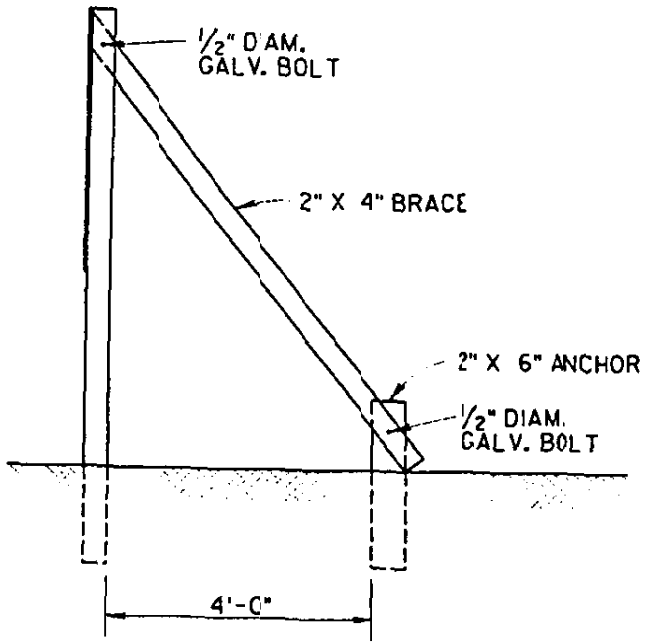
Allsbrook Goodman, Inc. Consulting Engineers

DORMITORY
LANGLEY AIR FORCE BASE
HAMPTON, VIRGINIA

NEW DETAIL

SKM-2





FRONT VIEW

END VIEW

U.S. AIR FORCE ACC MCP PROJECT SIGN DETAILS

NOTES:

1. POSTS SHALL BE S4S.
2. PLYWOOD SHALL BE EXTERIOR TYPE, A-C GRADE.
3. BEFORE PAINTING, SURFACE SHALL BE CLEAN, DRY, FREE OF GREASE AND SANDED.
4. PAINT WITH ONE EXTERIOR OIL PRIME COAT AND EXTERIOR TYPE ALKYD, CONFORMING TO MASTER PAINTERS INSTITUTE MPI-9, MPI GLOSS LEVEL 6. COLOR SHALL MATCH SHERWIN WILLIAMS SW 2175.
5. ALL LETTERING SHALL BE EXTERIOR TYPE ALKYD. COLOR SHALL MATCH SHERVIN WILLIAMS SW 1900.
6. DECALOMANIA FOR CORPS OF ENGINEERS INSIGNIA AND U.S. AIR FORCE EMBLEM WILL BE FURNISHED BY THE CONTRACTING OFFICER FOR INSTALLATION BY THE CONTRACTOR.
7. ALL EXPOSED WOOD (POSTS, SUPPORTS, BACK, ETC.) SHALL BE PAINTED THE SAME BACKGROUND COLOR AS THE SIGN.
8. LETTERING STYLE SHALL BE EITHER HELIOS EXTRA BOLD CONDENSED, HELIOS BOLD II, HELVETICA BLACK ROMAN, OR HELVETICA BOLD ROMAN.

SCHEDULE

SPACE	HEIGHT	LINE	DESCRIPTION	LETTER HEIGHT	STROKE
A	3"	1	U.S. AIR FORCE PROJECT	1.5"	3/16"
B	1"	2	IN PARTNERSHIP WITH	1.5"	3/16"
C	1"	3	U.S. ARMY CORPS OF ENGINEERS	1.5"	3/16"
D	4"	4	PROJECT NAME	4"	1/2"
E	3"	5	PROJECT NAME CONT'D (IF REQ'D)	4"	1/2"
F	4"	6	GENERAL CONTRACTOR/A-E	1.5"	3/16"
G	1"	7	GENERAL CONTRACTOR/A-E	1.5"	3/16"
H	4"	8	PLANNED COMPLETION DATE	2.5"	1/4"
I	1"	9	BUILDING OCCUPANCY DATE	2.5"	1/4"
J	1"	10	RIBBON CUTTING DATE	2.5"	1/4"
K	2"				

Atch 2